

KARA LAVENDER LAW | Research Oceanographer, Sea Education Association (klavender@sea.edu)

Degree: When, where, what, and what in?

I received a bachelor of science degree in mathematics from Duke University in 1994, and was turned on to oceanography during an undergraduate semester at the Duke University Marine Lab followed by a course in physical oceanography. I received my PhD in physical oceanography from Scripps Institution of Oceanography/University of California, San Diego, in 2001. My dissertation research focused on mid-depth circulation and open-ocean deep convection in the Labrador Sea using observations from subsurface floats.

Did you stay in academia at all, and if so, for how long?

After earning my PhD, I was a post-doctoral scholar at the Woods Hole Oceanographic Institution (WHOI) in the physical oceanography department. I continued the same line of research from my graduate work for about 18 months before leaving WHOI to take a teaching position at Sea Education Association (SEA). SEA is a nonprofit, independent educational institution whose primary mission is to educate students onshore and at sea in the undergraduate SEA Semester program (<http://www.sea.edu>). While academic in nature, the SEA faculty position is quite different from a traditional faculty position in that its focus is primarily teaching, with no formal requirements for research.

How did you go about searching for a job outside of the university setting?

About midway through my postdoc, I began looking at job listings for something *different*. I wasn't exactly sure what I was looking for, although I was very interested in teaching. I did some self-assessment and job search training by reading books about careers outside academia and talking with friends who had left academia. I mainly looked at academic listings that were different from traditional faculty positions, using resources such as *Eos*, *Chronicle for Higher Education*, and <http://higherjobs.com>. I was fortunate to live in Woods Hole, where SEA is located, and before applying for the position, I talked to a number of people who were familiar with the institution and the faculty position.

Is this the only job (post-academia) that you've had? If not, what else did you do?

I have worked at SEA since leaving WHOI in 2003; however, my position at SEA has changed from Oceanography Faculty/Chief Scientist to Research Oceanographer.

What is your current job? What path did you take to get there?

As a SEA Research Oceanographer, I focus mainly on research into marine debris (i.e., ocean trash). For six years, I primarily taught undergraduates in the SEA Semester program, which includes six weeks of instruction and student research project development on our



Woods Hole campus, followed by a six-week research cruise aboard our sailing oceanographic research vessels. I typically taught two SEA Semester classes per year, with administrative responsibilities filling out the nine-month appointment. For a time, I used the remaining three months per year to continue my research at WHOI as a Visiting Investigator before shifting my attention to special projects at SEA, including new program development, and, ultimately, research into plastic marine debris. I was fortunate to receive federal funding to analyze plastic debris data that SEA has been collecting and archiving for more than 25 years. This research opportunity was also very timely, as it coincided with the birth of my daughter. While I'm no longer able to be at sea 12 weeks per year, my current position allows me to work part time and to stay active in the oceanography field.

What did your oceanographic education (or academic career) give you that is useful in your current job?

I have learned a tremendous amount in every step of my career. In my formal training, I gained a solid foundation in physical oceanography that I now apply to my current research in the distribution of floating plastic debris (not an application I would have anticipated). More generally, I honed my analytical and critical thinking skills, became comfortable with public speaking, and learned how to write. While scientific writing is quite specialized, clear and concise writing is a universally necessary skill. In my teaching position at SEA, I expanded my oceanographic knowledge and intellectual interests by advising students in research projects spanning the four major disciplines. I now think of myself as more of a generalist, trained in physical oceanography but able to apply my knowledge and skills to a variety of oceanographic questions. In my research position I have also learned how to better convey scientific information to the public. Because of the strong public interest in marine debris (commonly referred to as “garbage patches”), I have had the opportunity to participate in many media interviews and to write for a variety of audiences.

Is the job satisfying? What aspects of the job do you like best/least?

The job is very satisfying because I am continually challenged to make my way in relatively uncharted territory (my position is new at SEA). I love the independence and flexibility that comes with my research position, but I now have the pressure of finding continued funding to support it. In many ways I have ended

up in a more “traditional” academic job, but I have come to this position in my own time and on my own terms. I do miss teaching and being at sea, and I hope to ultimately incorporate these activities back into my career. As for any working parent, one of the hardest challenges is the work-family balance—always wanting to do more on both sides of the equation.

Do you have any recommendations for new grads looking for jobs?

I never would have anticipated the path that my career has taken in the 10 years since receiving my PhD. I believe that it is important to keep your eyes and mind open to positions you might not have considered, while keeping sight of the kind of work you enjoy and the kind of lifestyle you would like to lead.